



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,162	04/25/2002	Albert Modi	MODL3003/JEK	4361
23364	7590	12/14/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			HO, THOMAS M	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/030,162	MODL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thomas M. Ho	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/15/02, 9/8/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. Claims 1-9 are pending.

### ***Specification***

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### ***Arrangement of the Specification***

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino

acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Content of Specification***

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and

Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly

complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).



- (l) Sequence Listing, See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 4, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, these claims recite the term “and/or”. This term is indefinite and does not explicitly state whether the following recitation is to be included or not.

Claim 4 is further rejected in view of the recitation “for authenticating a terminal with respect to a user and the user with respect to the data carrier”. It is unclear what applicant means by the phrase “with respect to”. “With respect to” is a phrase that broadly means that the user is somehow associated or involved in an authentication process with the terminal or data carrier. Furthermore, it appears from the claim that at least two authentication processes are being recited. The Examiner recommends however claiming these distinct processes more clearly.

It appears that claim 4 actually recites a data carrier C that participates in a process of authentication where a terminal is being authenticated to a user, and participates in a process where a user is being authenticated to the same data carrier. However, these limitations are not explicitly claimed, but rather appear to be an environment for which the context of independent claim 4 is recited.

For purposes of examination and/or shall be interpreted with elements A and B being together, or in the alternative, Elements A or B being present.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boerbert, US patent 5,272,754.

In reference to claim 1:

Boerbert discloses a method for authenticating a user(U) of a data carrier (c) for authorized use of the data carrier and for authenticating a data carrier terminal (T) for authorized accessing by

Art Unit: 2134

the data carrier terminal of memory areas of the data sheet carrier (Column 2, lines 17-24, 37-45), comprising the following steps:

- Reading a secret code (CODE) from the data carrier (C) by the data carrier terminal (T), whereby the secret code (CODE) is stored on a memory location that can be accessed only by authorized data terminals (T) and/or can be decrypted correctly, where the code is the token information. (Figure 4, Items 100, 102), and where the token information is read by the terminal and decrypted (Column 5, lines 10-26) & (Column 4, line 48 – Column 5, line 11) & (Column 7, line 52 – Column 8, line 2)
- Presenting the read secret code (CODE) to the user (U), where the code presented is the token information which is the countersign. (Column 11, lines 3-11)
- Presenting a biometric feature (BIO) of a user (U) (Column 7, lines 40-46)

Boerbert fails to explicitly disclose

- Comparing the presented biometric feature (BIO) with a biometric feature stored on the data carrier (C).

Boerbert however discloses that in an alternate embodiment, the user authentication device can include a biometric device, which would then be sent to a computer during the user verification process described in Fig 4. (Column 7, lines 40-46)

It is shown in Figure 4, that the invention of Boerbert verifies the authentication information at Items 114. (Column 10, lines 1-10) discloses the computer 60 checks the authentication information for correctness.

It would have been obvious to one of ordinary skill in the art to compare the presented biometric information in order to verify it in order to authenticate the user based on biometric information.

In reference to claim 2:

Boerbert (Column 9, line 57 – Column 10, line 11) discloses a method according to claim 1, characterized in that a PIN is in addition presented to the terminal (T), being compared with a PIN stored on the data carrier (C).

In reference to claim 3:

Boerbert (Column 7, lines 40-46) discloses a method according to claim 1 or claim 2, characterized in that a fingerprint of a user (U) is used as the biometric feature (BIO).

In reference to claim 4:

Boerbert discloses a data carrier (C) for authenticating a terminal with respect to a user and the user with respect to the data carrier (Column 2, lines 17-24, 37-45) & Figure 4, comprising a first memory area in which a secret code(CODE) is stored such that the secret code can be read and/or decrypted and displayed by an authorized data carrier terminal (T) (Column 5, lines 10-26) & (Column 4, line 48 – Column 5, line 11) & (Column 7, line 52 – Column 8, line 2), and a second memory area in which data are stored which serve to authenticate the user with respect to the terminal. (Figure 2) & (Figure 4, Item 114) & (Column 5, lines 10-25)

In reference to claim 5:

Boerbert (Column 9, line 57 – Column 10, line 11) discloses a data carrier according to claim 4, characterized in that a PIN is stored in a third memory area.

In reference to claim 6:

Boerbert (Column 7, lines 40-46) discloses a data carrier according to either of claims 4 and 5, characterized in that the biometric data are generated by a fingerprint.

In reference to claim 7:

An authentication system comprising a data carrier (C) with memory areas and a data carrier terminal (T) for accessing the memory areas of the data carrier, characterized in that

- The data carrier (C) has a first memory area for storing a secret code (CODE) (Column 5, lines 10-25) and a second memory area for storing biometric data. (Column 7, lines 40-46)
- The data carrier terminal (T) has a first device which is authorized for reading the secret code (CODE) from the first memory area and/or for decrypting the read secret code (CODE) and for presenting the read secret code on a display, where the code is the token information. (Figure 4, Items 100, 102), and where the token information is read by the terminal and decrypted (Column 5, lines 10-26) & (Column 4, line 48 – Column 5, line 11) & (Column 7, line 52 – Column 8, line 2),

Boerbert fails to explicitly disclose

- A device for comparing the read biometric data (BIO) with biometric data stored in the second memory area in the data carrier (C) and/or in the terminal (T).
- and a second device for reading biometric data (BIO)

Boerbert however discloses that in an alternate embodiment, the user authentication device can include a biometric device, which would then be sent to a computer during the user verification process described in Fig 4. (Column 7, lines 40-46)

It is shown in Figure 4, that the invention of Boerbert verifies the authentication information at Items 114. (Column 10, lines 1-10) discloses the computer 60 checks the authentication information for correctness.

It would have been obvious to one of ordinary skill in the art to compare the presented biometric information in order to verify it in order to authenticate the user based on biometric information.

In reference to claim 8:

Boerbert (Column 9, line 57 – Column 10, line 11) discloses an authentication system according to claim 7, characterized in that the data carrier (C) has a third memory area for storing a PIN.

In reference to claim 9:

Boerbert (Column 7, lines 40-46) discloses an authentication system according to claim 7 or 8, characterized in that the stored biometric data are generated by a fingerprint.

*Conclusion*

7. The following art not relied upon is made of record:

- US patent 5036461 discloses a two way authentication system between a smartcard and an authentication terminal.
- US patent, 5892838 discloses a biometric recognition system which is acquired to perform a match, the results of which are displayed to a user.

8. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (571)272-3838.


The Examiner may also be reached through email through [Thomas.Ho6@uspto.gov](mailto:Thomas.Ho6@uspto.gov)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist	Telephone: 571-272-2100	Fax: 703-872-9306
Customer Service Representative	Telephone: 571-272-2100	Fax: 703-872-9306

TMH

December 8<sup>th</sup>, 2005

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER